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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,404	10/22/2004	Tsuyoshi Kashima	885A.0002.U1(US)	4456

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HARRINGTON & SMITH, PC  
4 RESEARCH DRIVE  
SHELTON, CT 06484-6212

EXAMINER
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BRANDT, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/500,404

Applicant(s)

KASHIMA, TSUYOSHI

Examiner

Christopher M. Brandt

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 USC 110(a)-(d), which papers have been placed of record in the application file.

### ***Information Disclosure Statement***

The information disclosure statement submitted on June 28, 2004 has been considered by the examiner and made of record in the application file.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-4** are rejected under 35 USC 103(a) as being unpatentable over **Anderson et al. (US Patent 6,148,198, hereinafter Anderson)** in view of **Cohen (US Patent 5,465,390)**.

Consider **claim 1**. Anderson discloses a node selecting method in which a mobile node moving among a plurality of nodes substantially uniformly dispersedly arranged selects a candidate node for next communication (column 1 lines 13-24), characterized in that the mobile node executes:

a first step of identifying nodes present within a communication zone of the mobile node (column 5 lines 13-18, read as storing identifier codes in the IRDB database);

a second step of counting the number of overlaps between a communication zone of the identified node and communication zones of the other identified nodes for each identified node (column 7 lines 1-3, read as the overlap counter is incremented by one); and

a third step of selecting, as the candidate node for communication, the identified node in which the largest number has been counted (column 7 lines 4-13, read as the processor selects the best service based on the overlap counter exceeding a predetermined threshold).

Anderson discloses the claimed invention except he fails to disclose **specifying** nodes (Anderson discloses identifying).

However, Cohen discloses specifying nodes (abstract, read as determining the geographical location and the technical characteristics).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Cohen into the invention of Anderson

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in order to lay out / implement the infrastructure of a cellular communication network using a dynamic approach (abstract, column 3 lines 9-24).

Consider **claim 2**. Anderson discloses a node selecting method in which a mobile node moving among a plurality of nodes substantially uniformly dispersedly arranged selects a candidate node for next communication (column 1 lines 13-24), characterized in that the mobile node executes:

a first step of identifying a first node present within a communication zone of the mobile node (column 5 lines 13-18, read as storing identifier codes in the IRDB database);

a second step of identifying a second node present within a communication zone of the neighbor node (column 4 lines 34-46, read as setting an overlap flag if first and second service providers operate within the same coverage area);

a third step of counting the number of specifications in the first and second steps for each neighbor node (column 7 lines 1-3, read as the overlap counter is incremented by one); and

a fourth step of selecting, as the candidate node for communication, the neighbor node in which the number of the specifications in a predetermined order is large (column 7 lines 4-13, read as the processor selects the best service based on the overlap counter exceeding a predetermined threshold).

Anderson discloses the claimed invention except he fails to disclose **specifying** a node and a **neighbor** node.

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However, Cohen discloses a neighbor node (column 3 lines 9-24, read as neighboring cells having common overlapping zones).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Cohen into the invention of Anderson in order to lay out / implement the infrastructure of a cellular communication network using a dynamic approach (column 3 lines 9-24).

Consider **claim 3 and as applied to claim 1**. Anderson and Cohen disclose the method characterized in that the selection is not performed, if the specified node in which the largest number has been counted is the same as a node with which the mobile node is currently in communication (Cohen; column 11 lines 8-15).

Consider **claim 4 and as applied to claim 3**. Anderson and Cohen disclose the method characterized in that when there are a plurality of specified nodes in which the largest number has been counted, an arbitrary one node is selected (Anderson; column 7 lines 4-13).

**Claims 5-8** are rejected under 35 USC 103(a) as being unpatentable over **Anderson et al.** (US Patent 6,148,198, hereinafter **Anderson**) in view of **Cohen** (US Patent 5,465,390) and further in view of **Hronek** (US Patent 5,465,390).

Consider **claims 5 and 6 and as applied to claims 1 and 2**. Anderson and Cohen disclose the claimed invention except they fail to teach the method characterized in that the mobile node executes the first to third steps at predetermined periods.

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However, Hronek discloses the method characterized in that the mobile node executes the first to third steps at predetermined periods (column 9 lines 36-42, read as a time-of-day based system to update the IRDB).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Hronek into the invention of Anderson and Cohen in order to dynamically maintain different Intelligent Roaming Database or Preferred Roaming Lists (PRL) in a mobile handset (abstract).

Consider **claim 7 and as applied to claim 5**. Anderson, Cohen, and Hronek disclose the method characterized in that the predetermined period is changed in accordance with a movement speed of the mobile node (Cohen; column 19 line 60 – column 20 line 2).

Consider **claim 8 and as applied to claim 5**. Anderson, Cohen, and Hronek disclose the method characterized in that the predetermined period is changed in accordance with an arrangement density of the plurality of nodes (column 2 lines 45-52).

### ***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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**Hand-delivered responses** should be brought to

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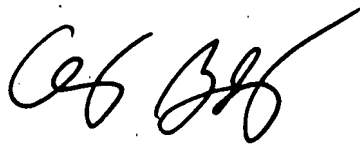
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Christopher M. Brandt

C.M.B./cmb



NICK CORSARO  
SUPERVISORY PATENT EXAMINEE  
TECHNOLOGY CENTER 2600

June 20, 2007